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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/924,045	08/07/2001	James W. Thackeray	40678-5C	6976

7590 03/05/2002

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EXAMINER

BARRECA, NICOLE M

ART UNIT	PAPER NUMBER
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1756

4

DATE MAILED: 03/05/2002

Please find below and/or attached an Office communication concerning this application or proceeding.

MF-4

**Office Action Summary**

Application No.

09/924,045

Applicant(s)

THACKERAY ET AL.

Examiner

Nicole M. Barreca

Art Unit

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 07 August 2001.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 36-57 is/are pending in the application.
- 4a) Of the above claim(s) 36-42 and 47-53 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 43-46 and 54-57 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☒ Claim(s) 36-57 are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

**Priority under 35 U.S.C. §§ 119 and 120**

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☒ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 3.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other:

**DETAILED ACTION**

***Election/Restrictions***

1. Restriction to one of the following inventions is required under 35 U.S.C. 121:
  - I. Claims 36-42, 47-53, drawn to coated substrate and method for making a relief image using an antireflective/antihalation coating comprising a benzoguanamine crosslinker, classified in class 430, subclass 322.
  - II. Claims 43-46, 54-57, drawn to a coated substrate and method for making a relief image using an antireflective/antihalation coating comprising a crosslinker and an anthracene material, classified in class 430, subclass 322.

The inventions are distinct, each from the other because of the following reasons:

2. Inventions I and II are related as subcombinations disclosed as usable together in a single combination. The subcombinations are distinct from each other if they are shown to be separately usable. In the instant case, invention I has separate utility as an antireflective composition comprising a benzoguanamine crosslinker and a resin binder which does not include an anthracene material, such as a novolak resin. In addition invention II has separate utility such as an antireflective composition comprising an anthracene material and a crosslinker which is not a benzoguanamine, such as a melamine or glycoluril crosslinker. See MPEP § 806.05(d).
3. Because these inventions are distinct for the reasons given above and the search required for Group I is not required for Group II, restriction for examination purposes as indicated is proper.

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4. During a telephone conversation with Peter Corless on 2/6/02 a provisional election was made with traverse to prosecute the invention of Group II, claims 43-46, 54-57. Affirmation of this election must be made by applicant in replying to this Office action. Claims 36-42, 47-53 are withdrawn from further consideration by the examiner, 37 CFR 1.142(b), as being drawn to a non-elected invention.

5. Applicant is reminded that upon the cancellation of claims to a non-elected invention, the inventorship must be amended in compliance with 37 CFR 1.48(b) if one or more of the currently named inventors is no longer an inventor of at least one claim remaining in the application. Any amendment of inventorship must be accompanied by a request under 37 CFR 1.48(b) and by the fee required under 37 CFR 1.17(i).

#### ***Specification***

6. The abstract of the disclosure is objected to because it does not describe the inventions claimed in the present application. Correction is required. See MPEP § 608.01(b).

#### ***Claim Rejections - 35 USC § 112***

7. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

8. Claims 43-46 and 54-57 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

9. Claim 43 recites the limitation "the antireflective layer" in line 5. There is insufficient antecedent basis for this limitation in the claim.

10. Claim 44 recites the limitation "the antireflective composition layer" in line 1.

There is insufficient antecedent basis for this limitation in the claim.

11. Claim 54 recites the limitation "the antihalation composition layer" in line 4.

There is insufficient antecedent basis for this limitation in the claim.

12. Claim 56 recites the limitation "the antireflective composition" in line 1. There is insufficient antecedent basis for this limitation in the claim.

### ***Double Patenting***

13. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and, *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

14. Claims 54 and 55 are rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claim 25 of U.S. Patent No. 6,165,697. Although the conflicting claims are not identical, they are not patentably distinct from each other because both recite methods comprising applying an antihalation composition on a substrate wherein the antihalation composition comprises an anthracene material, crosslinking the antihalation composition, and applying a photoresist layer over the antihalation layer.

15. Claims 54, 56 and 57 are rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1, 7 and 10 of U.S. Patent No. 5,851,738. Although the conflicting claims are not identical, they are not patentably distinct from each other because both recite methods for forming a relief image on a substrate, the methods comprising applying an antihalation composition on a substrate wherein the antihalation composition comprises an anthracene material, and applying a photoresist layer over the antihalation layer. Both the application and the patent recite claims wherein the substrate is a microelectronic wafer (claim 7 of 5,851,738 and claim 57 of present application) and wherein the antihalation composition comprises a thermal acid generator (claim 10 of 5,851,738 and claim 56 of present application).


16. Claims 43-46 are rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1, 6 and 12 of U.S. Patent No. 5,851,730. Although the conflicting claims are not identical, they are not patentably distinct from each other because both recite a coated substrate comprising a coating layer of an antihalation/antireflective composition comprising a crosslinker and an anthracene material and a coating layer of a photoresist over the antihalation/antireflective layer. Both the application and the patent recite claims wherein the substrate is a microelectronic wafer (claim 6 of 5,851,730 and claim 46 of present application) and wherein the antihalation/antireflective composition comprises a thermal acid generator (claim 12 of 5,851,730 and claim 45 of present application).

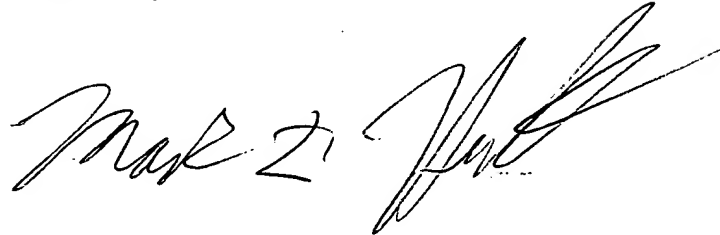
**Conclusion**

17. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Nicole M. Barreca whose telephone number is 703-308-7968. The examiner can normally be reached on Monday-Thursday (8:00 am-6:30 pm).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mark Huff can be reached on 703-308-2464. The fax phone numbers for the organization where this application or proceeding is assigned are 703-872-9310 for regular communications and 703-872-9311 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-0661.

nmb   
February 20, 2002



MARK F. HUFF  
SUPERVISORY PATENT EXAMINER  
TECHNOLOGY CENTER 1700